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NOTICE OF ALLOWANCE AND FEE(S) DUE

25227 7590 04/27/2016 MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 400 MCI FAN VA 22102 EXAMINER
LUU, PHO M

ART UNIT PAPER NUMBER
2824

DATE MAILED: 04/27/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/589,375	09/27/2007	Kengo Maeda	559502005200	6037				
TITLE OF INVENTION; SEMICONDUCTOR MEMORY								

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/27/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or trans ng the P nerwise	mitting the ISSU atent, advance or in Block 1, by (a	JE FEE and PUBLIC rders and notification a) specifying a new of						
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
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MCLEAN, VA 2	22102									(Depositor's name)
										(Signature)
										(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRM	IATION NO.
10/589,375				Kengo Maeda				559502005200	6	037
TITLE OF INVENTION	SEMICONDUCTOR N	MEMOR	Y							
APPLN. TYPE	SMALL ENTITY	ISS	UE FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE	DA	ATE DUE
nonprovisional	NO		\$1510	\$300		\$0		\$1810	07	/27/2010
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3. ASSIGNEE NAME A										
PLEASE NOTE: Unli recordation as set forth	ess an assignee is ident 1 in 37 CFR 3.II. Comp	ified bel	ow, no assignee f this form is NO	data will appear on t T a substitute for filin	the p	atent. If an assign assignment.	ee is io	lentified below, the do	cument has	been filed for
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Please check the appropri	ate assignee category or	categor	ies (will not be pr	inted on the patent):		Individual Co	orporati	on or other private gro	up entity [Government
4a. The following fee(s)	are submitted:		48	o. Payment of Fee(s):	(Plea	se first reapply ar	ny prev	lously paid issue fee	shown abov	/e)
Issue Fee				A check is enclose						
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			1)	☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any						
				overpayment, to	Depo	sit Account Numbe	er	(enclose a	extra copy	of this form).
	SMALL ENTITY state	ıs. See 3	7 CFR 1.27.					ITTY status. Sec 37 CI		
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) w	ill not be accepted at and Trademark	d from anyone other t Office.	han t	he applicant; a regi	stered.	attorney or agent; or th	e assignee c	or other party in
Authorized Signature						Date				
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This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.31 U.S.C. USPTO rden, sho NOT S	The informatic 122 and 37 CFR Time will vary ould be sent to the END FEES OR	on is required to obtain 1.14. This collection depending upon the e Chief Information C COMPLETED FORM	n or r is est indiv Office IS TO	etain a benefit by t imated to take 12 i idual case. Any co er, U.S. Patent and D THIS ADDRESS	he pub minuter omment Trader S. SEN	tic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner I	by the USF g gathering, ne you requ artment of C or Patents, I	TO to process) preparing, and ire to complete commerce, P.O. P.O. Box 1450,

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MORRISON &	FOERSTER LLP	LUU, PHO M				
1650 TYSONS E	OULEVARD	ART UNIT	PAPER NUMBER			
SUITE 400 MCLEAN, VA 2	2102	2824 DATE MAILED: 04/27/2010				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 516 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 516 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/589 375 MAEDA ET AL. Notice of Allowability Examiner Art Unit 2824 PHO M LUIL -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to Application filed 08/14/2006 to 02/04/2010. The allowed claim(s) is/are 1-10. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 04/10/2007 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other . /Pho M Luu/ Primary Examiner, Art Unit 2824

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DETAILED ACTION

DETAILED ACTION

Acknowledgment is made of applicant's Preliminary Amendment filed August 14,
 The changes and remarks disclosed therein were considered.

2 Claims 1-10 are pending in the application.

Drawings

3 The drawings were received on September 27, 2007. These drawings are review and accepted by examiner.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which
papers have been placed of record in the file.

Information Disclosure Statement

Acknowledgment is made of applicant's Information Disclosure Statement
 (IDS) Form PTO-1449, filed April 10, 2007. The information disclosed therein was considered.

Allowance

6. Claims 1-10 is allowed.

The following is an examiner's statement of reasons for allowance:

The prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Choi et al and Kurumada et al taken individually or in combination, do not teach the claimed invention having the following limitations, in combination with the remaining claimed limitations:

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As in claims 1 and 2: "a sync read control circuit for releasing an upper group of a received address as a memory access address in synchronization with the clock signal and for sequentially modifying and releasing as a burst address a remaining of the received address excluding the upper group in synchronization with the clock signal" in a semiconductor memory having a burst mode reading function of continuously reading data in synchronization with a clock signal as claimed in the independent claims 1 and 2. Claim 3 is also allowed because of its dependency on claim 1 or 2; or

As in claim 4: "a sync read control circuit for releasing an upper group of a received address as a memory access address in synchronization with the clock signal and for sequentially modifying and releasing as a burst address a remaining of the received address excluding the upper group in synchronization with the clock signal" in a semiconductor memory having a burst mode reading function of continuously reading data in synchronization with a clock signal as claimed in the independent claim 4. Claim 5-7 are also allowed because of their dependency on claim 4; or

As in claim 8: "an address control circuit is constructed as a composite circuit having a master circuit of a flip-flop connected at an upstream side of a decoder and a slave circuit of the flip-flop connected at a downstream side of the decoder, which is arranged responsive to a read switching signal, a clock signal, a synchronous address signal synchronized with the clock signal, and an asynchronous address signal received from the outside" in an address control

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circuit provide in a semiconductor memory as claimed in the independent claim 8.

Claims 9-10 are also allowed because of their dependency on claim 8.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

 Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 571.272.1876. The examiner can normally be reached on M-F 8:00AM – 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 571.272.1869. The official fax number for the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

Informations regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Pho M Luu/ Primary Examiner, Art Unit 2824 04/18/2010.